



March 7, 2014

**Letter – Expression of Interest
VIA ECFS**

Chairman Thomas Wheeler
Commissioner Mignon Clyburn
Commissioner Jessica Rosenworcel
Commissioner Ajit Pai
Commissioner Michael O’Rielly
Jonathan Chambers
Federal Communications Commission
445 12th Street, SW 20024
Washington, DC

**Re: Expression of Interest – Rural Broadband Experiments
Connect America Fund, WC Docket No. 10-90**

Dear Chairman Wheeler, Commissioners, and Mr. Chambers,

This letter is to express Cherokee Telephone Company’s interest in receiving funding from the Rural Broadband Experiments announced at the January 30th FCC Open Meeting.

BACKGROUND

For many years Cherokee Telephone Company, doing business as Cherokee Communications, has been a forerunner in the implementation of new technologies within the industry. From implementing digital switches to building a high speed DSL plant that covered approximately 90% of our serving area over 15 years ago we have tried to always be on the leading edge of new technologies that customers need to stay current with modern demands in both business and at the home. We have been incorporated in Oklahoma since 1959 and serve ten exchanges within our ILEC certifications. We currently serve customers with high speed data on a variety of network platforms that include ADSL2+, VDSL, and FTTH. We are currently building a FTTH plant utilizing GPON in nearby non-ILEC areas that will be overlaid with fixed LTE wireless service. This company has always been dedicated to not only providing services that are comparable to what customers would find in larger metro areas but in many cases surpassing them. This has become increasingly difficult in the current environment as support mechanisms have eroded. Since rural areas are intrinsically higher costs compared to metro areas due to the reduced density and therefore reduced revenue per capital dollar invested, we hope to continue our level of service to rural



customers and not have them remanded to the other side of growing digital divide by utilizing this program. This letter serves to formally express our interest in participating in this program.

Service Area

The service area in question is yet to be defined as we are in the process of building out several areas in southeastern Oklahoma within price cap areas where the incumbent has declined any CAF funding on a statewide basis. Defining census tracts would be premature for us as we are currently designing out this FTTH project and the fixed wireless primarily in areas where there is limited access to broadband services; however the areas we are considering cover the census tracts in the following counties:

County

Bryan
Atoka
Coal
Pittsburgh

Anchor Institutions

Durant is the seat of Bryan County and as such is home to multiple agencies and governmental offices that would benefit from a robust broadband platform like FTTH and robust, licensed fixed wireless. It is also home to the Choctaw Nation, one of the largest Native American Tribal Governments in the US. There are numerous anchor institutions that would be served by this program. These include but are not limited to:

- Health clinics and wellness centers
- Continuing education and Vo-tech centers
- State and Federal Offices
- Municipal buildings, Courthouses, Emergency Management Offices and Recycling Centers
- Libraries and Genealogy centers
- K-12 Schools and District offices

Tribal Participation and Affiliation

The Choctaw Nation is headquartered in Durant Oklahoma and would benefit heavily from this type of deployment. They operate numerous businesses and community outreach operations within Bryan as well as Atoka, Coal and Pittsburgh Counties. Tribal participation would be expected to be extremely intensive as the Nation is very active in adopting any technology that would improve their member's



lives through job creation or education. We would not require any easements from them as all of our long haul fiber is on public and or private right of way. We would of course require access to tribal lands if we were to help support their anchor institutions they would want served

Technology Overview

Having been a rural service provider for over half a century we have learned that deployments that will be the most economical in the long run will be best served by a truly scalable and somewhat future proof technology. We have implemented almost every type of communications technology that serves either voice or data and have come to the conclusion that although wireless is more cost effective upfront, it is by far more expensive in operational costs as well as future upgrading than fiber. In addition there are certain absolute physical limitations that exist with wireless due to the limited bandwidth spectrum that exists. If the goal of the FCC and the Congress is to have a network that the citizens of the US can utilize for more than a generation and keep pace with the rest of the world we feel it vital that FTTH technologies be deployed now. The GPON standard that we would be utilizing is 2.5 Gbps worth of bandwidth shared at each node split between a maximum of 32 subscribers. The future standard that will be commercially available soon would share 10 Gbps with the same amount of subscribers. The overlay of our wireless LTE system would be done in locations where the economics would not make plowing in fiber possible, even with financial support mechanisms.

Funding

The amount of funding is to be determined as we are still currently in the due diligence stage and have yet to establish costs for either the one time funding it would require or the possibility of operational ongoing costs needed. The costs are understood for the actual technologies being implemented, but the total costs are not yet established because the total scale and scope of what would be included as far as the geography are not yet established.

Thank you for your consideration.

Sincerely,

Samuel Sanchez,

Cherokee Telephone Company